

## VEHICLE GAS EMISSION SAMPLING AND ANALYSIS ASSEMBLY

### ABSTRACT OF THE DISCLOSURE

A vehicle gas emission analyzer assembly for a vehicle having a passenger compartment includes a gas analyzer system adapted to determine concentration  
5 and/or mass flow of at least one exhaust gas of an internal combustion engine. The analyzer may include a particular housing for the gas analyzer system. The gas analyzer system may include a hydrocarbon gas analyzer that is operated at a temperature that is sufficiently high to reduce deposits of hydrocarbon molecules present in the sample gas. The gas analyzer may include an ultraviolet source  
10 including a discharge lamp having a discrete emission line at an absorption frequency for a particular nitrogen-based gas.

15